



Airman secures base flightline in Southwest Asia

U.S. Air Force (Scott T. Sturkol)

# Securing Aerial Approaches to Joint Airfield

By ROBERT B. HOLDSWORTH

**T**he national security of the United States relies on the ability to project airpower around the globe. The 2011 National Military Strategy articulates key capabilities of airpower crucial to securing U.S. national interests: the direct employment of globally integrated command and control, intelligence, surveillance, reconnaissance, and aerial strike capabilities, as well as the use of strategic and tactical airlift assets to effectuate rapid global mobility for joint forces in order to protect and advance national interests on the ground worldwide. America's airpower capabilities are unmatched; however, low-cost weapons systems with the potential to blunt U.S. aerial strike and power projection advantages have proliferated extensively among state and non-state adversaries, threatening approach and departure corridors for these key assets.

While the Services and Joint Staff have invested significant doctrine, organization, training, materiel, leadership, education, personnel, facilities, and policy resources to secure aircraft carriers and airfields against

penetrating and indirect fire attacks, the lack of clear joint guidance regarding responsibilities for securing aerial approach and departure corridors creates a vulnerable seam for which no single Service or functional component has clear accountability. This seam in joint doctrine could be mitigated by revising the Air Base Defense Considerations section in Joint Publication (JP) 3-10, *Joint Security Operations in Theater*.<sup>1</sup> This revision should emphasize the importance of securing aircraft approach and departure corridors and defining responsibilities as a joint force priority on par with the specific direction provided for defense of approaches to seaports found in JP 3-10's Seaport Facility Defense Considerations section.

The Government Accountability Office has estimated that 5,000 to 7,000

man-portable surface-to-air missiles (SAMs) circulate outside of state control and that "tens of thousands more missiles are stored in government arsenals with questionable stockpile security."<sup>2</sup> Furthermore, the Congressional Research Service has reported an unclassified list of 26 separate nonstate rebel, militant, and/or terrorist groups possessing SAMs.<sup>3</sup> U.S. military aircraft have employed onboard countermeasures and modified flight procedures to defeat this threat, but unclassified reports describe dozens of incidents of successful insurgent ground-fire attacks on U.S. aircraft since 2001. These successful attacks have included SAM strikes against Air Force C-5 and C-17 cargo aircraft in 2003 and 2004, respectively, and against nine Army helicopters between October 2003 and January 2004.<sup>4</sup>

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*the lack of clear joint guidance regarding responsibilities for securing aerial approach and departure corridors creates a vulnerable seam*

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The need for these low-density/high-demand aviation assets to remain available for response across multiple theaters magnifies the importance of defeating these threats to U.S. aerial might. Additionally, hazards to the Nation's airpower capabilities are exacerbated by "increased budget pressures" and prolonged acquisition lead times associated with replacing lost aircraft.<sup>5</sup> The speculation surrounding China's procurement of F-117 stealth fighter wreckage from Serbian farmers after the downing of a Nighthawk in 1999, and the subsequent demonstration of their own J-20 stealth fighter in January 2011, provides additional reinforcement for the need to provide insurance against combat losses in order to "continue to maintain our margin of technological superiority."<sup>6</sup> Straightforward joint guidance and careful attention from planners in tasking are required to emphasize the strategic nature of airfields and their approaches.

The current lack of clear joint guidance regarding Service and/or component responsibilities for the defeat of SAM threats to joint airfield approach and departure corridors increases the importance of Service doctrine in mitigating this threat. Unfortunately, a review of Service doctrine reveals no definitive answer to the question of responsibility for security of aerial approaches for even single Service-owned/component-owned and -operated airfields.

### Current Doctrine

The Department of the Navy published Marine Corps Warfighting Publication (MCWP) 3-21.1, *Aviation Ground Support*, which identifies Marine Corps Military Police (MP) assigned to the Aviation Combat Element (ACE) Marine Wing Support Squadron as having the primary responsibility for organizing and training Marines for airbase ground defense duties in flightline security, control of access to aircraft in restricted areas, and so forth. Since this publication is published by the Navy, which does not normally conduct single-Service operations in contested land areas, we can assume that MCWP 3-21.1 is the authoritative guidance for defense of Navy as well as Marine aircraft operating from land-based airfields.

**Lieutenant Colonel Robert B. Holdsworth, USAF/ANG, is Commander of the 123<sup>d</sup> Security Forces Squadron, 123<sup>d</sup> Mission Support Group, 123<sup>d</sup> Airlift Wing, Kentucky Air National Guard.**

## *the current lack of clear joint guidance regarding Service and/or component responsibilities for the defeat of SAM threats increases the importance of Service doctrine in mitigating this threat*

This publication identifies the ACE commander as retaining responsibility for area security once air operations have moved from aircraft carriers to land-based airfields. It specifically tasks aviation units with organizing active defense measures based on threats to operations including equipping support and augmentation Marines with weapons and ammunition, conducting security patrols, using aerial reconnaissance, integrating close air and fire support, and tasking Marine Air Ground Task Force Ground Combat Element (GCE) units as an emergency last resort to defend Marine airbases. Though arming ACE Marines to conduct threat-based patrols and employing GCE Marines in emergency situations could be inferred as measures to address a SAM threat to Marine and/or Navy aviation operations, MCWP 3-21.1 provides no specific guidance with regard to mitigating SAM threats to aerial approach and departure corridors. The publication also references the obsolete JP 3-10.1, *Joint Tactics, Techniques, and Procedures for Base Defense* (July 23, 1996), an indication that MCWP 3-21.1 has not been updated recently in light of even the scant guidance to be found in the most current version of JP 3-10, published February 3, 2010.

Army doctrine tasks the MP corps to serve as its functional component responsible for the defense of airfields as a subset of its

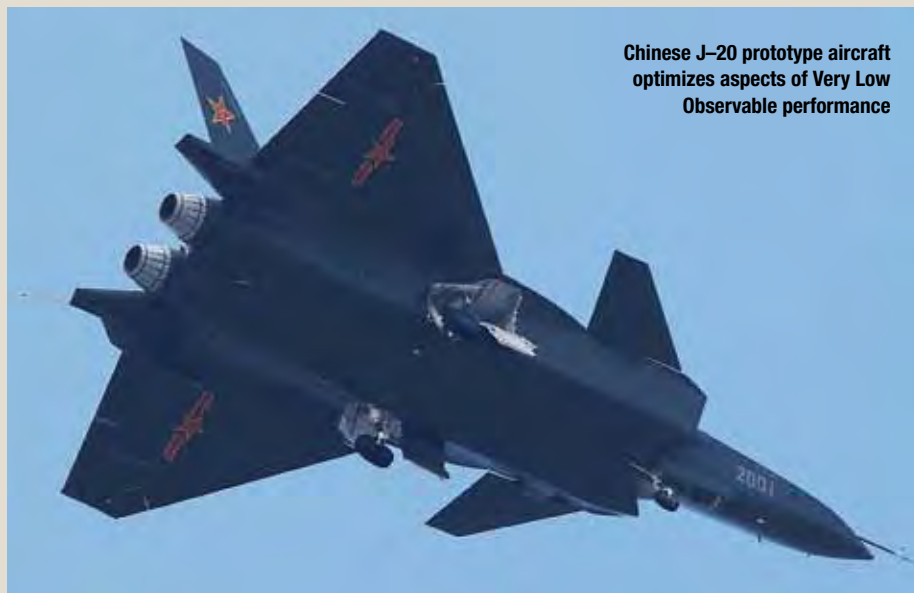
MP corps' area security responsibilities to protect critical assets and sites.<sup>7</sup> Field Manual (FM) 3-39, *Military Police Operations*, asserts that "airbase protection and defense is a key component of MP [area security] operations . . . when the threat exceeds the airbase capabilities." The manual goes on to establish that another MP mission, route security, includes the establishment of a movement corridor that "would typically include the airspace above it to allow the establishing unit to conduct aerial reconnaissance and fires." While not specifically identified with defeating SAM threats, these two MP missions could be combined via joint coordination to develop a procedure whereby Army MP forces are used to secure airfield approach and departure corridors. This potentiality could hardly be inferred and would require extensive justification and coordination by Joint Force Air Component Commander (JFACC) staff members to ensure the Joint Force Land Component Commander (JFLCC) Provost Marshal's and/or Joint Security Coordinator's staff tasked it appropriately and provided the requisite oversight to ensure the approach and departure corridor security mission was not subsumed by the MP corps' numerous other mission sets and competing JFLCC priorities.

Air Force guidance for mitigating the SAM threat to airfield approaches is found in



**Airman patrols perimeter of airfield during combat training exercise with U.S. and allied air forces**

U.S. Air Force (Brett Clashman)



Chinese J-20 prototype aircraft optimizes aspects of Very Low Observable performance

Air Force Instruction (AFI) 31-101, *Integrated Defense*, which directs that “commanders must coordinate necessary security operations support within the Base Security Zone (BSZ) . . . by coordinating via their operational chain of command with the appropriate base cluster commander, area commander, or command authority/host nation responsible for ground forces operating within the BSZ.” This instruction implements in Air Force doctrine the aforementioned air base defense guidance from JP 3-10 and introduces the Air Force-specific term *base security zone* for use in describing what JP 3-10 articulates as the “base boundary.” AFI 31-101 goes on to instruct Air Force planners to “support the establishment and adjustment of the [joint] base boundary . . . to include the area from which a threat can launch an attack against . . . aircraft approaching/departing the base.” Essentially, Air Force doctrine seeks either to request extension of the joint base boundary (secured by another component’s/Service’s base defense force) out to the edge of the SAM footprint or to mandate that Air Force commanders identify this threat area when requesting support from joint security area (JSA) commanders outside the base boundary. Unfortunately, the document offers no recommended solution as to how to secure the area if forces are not made available from either another Service or the host nation.

### Shortfalls

Current joint doctrine does little to address the seams in Service guidance regarding responsibility for securing

approach and departure corridors against SAM threats. JP 3-10 articulates the fact that aircraft are “especially vulnerable when operating in the ‘low and slow’ take-off and landing flight regimes” and that “approach and departure corridors . . . are critically important and a challenging joint force security consideration.” The publication goes on to pronounce that the airspace above JSAs is not normally included therein, but is governed by procedures in JP 3-52, *Joint Airspace Control*. However, JP 3-52 states that the “JFACC may have to orchestrate special procedures (ground patrols in vicinity of approach path)” to defend against SAM threats.

JP 3-52 does not address the fact that the JFACC does not normally have dedicated ground forces assigned or attached capable of performing this requirement over the 25 square kilometers out from the joint airfield that “historical experience with irregular threat forces and their use of . . . shoulder-launched [SAMs] gives [as] a planning factor.”<sup>8</sup> The unaddressed assumption implies that the JFACC must request from the JFLCC that either the Joint Security Coordinator extend what JP 3-10 refers to as the base boundary beyond the immediate perimeter of the base cantonment area to encompass the “footprint” of potential SAM launch sites when hosting JFACC assets, or task the battlespace owners of JSAs outside base boundaries to use their own resources to undertake the actions necessary to meet JFACC security requirements for defense of aircraft approach and departure corridors.

As a practical matter, when allocating missions and resources among the components of the joint force, this staff coordination does not normally rise to the attention of the component commanders or the joint task force commander and is thus left to the cooperative efforts of their respective staffs. This cooperation after establishment of the joint command is then further complicated by the fact that chapter II of JP 3-10 goes on to direct that a “component commander with unique security requirements (for example, those related to the shoulder-launched SAM footprint around a joint operating base) should expect to provide the majority of forces for the defense of those assets/bases.” Since the JFACC does not normally control the JSAs located around the air component’s airfields, a function normally tasked to an Army, Marine Corps, coalition, or host nation battlespace owner (with movement, maneuver, protection and/or sustainment requirements of their own), securing the approach and departure corridors to joint airfields is further challenged. Moreover, the JFACC senior officers on joint bases, often designated as the Senior Airfield Authority (SAA), normally have organic security assets sufficient only for close-in security of the facilities, ramps, taxiways, runways, and so forth located on or immediately adjacent to the joint airfield.<sup>9</sup>

On a joint base, the commander may not necessarily be “dual-hatted” as the SAA, and may have competing priorities and/or limited resources to perform base perimeter security even when the boundary is established well short of the SAM threat’s total footprint. The JFACC SAA is thus dependent upon the JFLCC JSA commanders or base commanders to dedicate limited manpower resources to occupying or patrolling potential SAM launch sites along aircraft approach and departure corridors in support of the JFACC security requirements.

This situation drives the need for enhancing the joint doctrine for air base defense found in JP 3-10 to provide directive guidance that will assist in identifying the SAM threat to aerial approach and departure corridors as a joint force priority (and delineate component responsibilities for addressing it) during the tasking process in order to incorporate these requirements into either the JFACC or JFLCC allocated forces and command and control responsibilities.



## A Way Forward

It can be argued that no seam actually exists with regard to securing approach and departure corridors because JP 3–10 mentions that “in support of the JFC’s concept of operations, the JFLCC plans and conducts security operations to ensure protection of US . . . critical assets” and goes on to comment that the “JFLCC will normally assign an Army maneuver enhancement brigade [MEB] for security of defined geographic areas.” The MEB is described as “a modular support brigade [that] . . . performs joint security and protection tasks.”<sup>10</sup> MEBs do not normally deploy with their own subordinate units, but can provide command and control for MP and airspace management units as well as engineer, air defense, and various other specialties assigned to other brigades and divisions.<sup>11</sup>

The MEB was also designed to incorporate Air Force liaison elements into its area security and control mission set, which could provide the joint platform necessary for assessing potential SAM launch sites and controlling patrols and observation posts to defeat this threat to joint air operations. Unfortunately, as previously indicated, JP 3–10 provides conflicting guidance with regard to component responsibilities for securing aerial approach and departure corridors for joint airfields, and although the MEB is an implied solution for securing the areas outside of joint

air fields, opportunities for disagreements in the definition of *critical assets* and accountability for defeating the SAM threat to air assets demand revised and joint guidance.

Fortunately, a model for resolving this disconnection between defending airfields and their approaches can be found under Seaport Facility Defense Considerations in JP 3–10. Outside of the land combat commander’s area of operations and in conjunction with the host nation, Navy and Coast Guard forces are tasked with securing the shore boundaries for joint seaport facilities as well as “waterside harbor approach[es]” during normal operations.<sup>12</sup> While it is intuitively obvious that JFMCC forces are tasked with providing security for their own sea or river approaches, the solution for securing shore approaches is instructive in resolving the apparent doctrinal seam with regard to aerial approaches to joint airfields.

In “high risk situations” where the shore boundary of the harbor facility of a seaport is not located within the commander’s area of operations, JP 3–10 suggests attaching a unit from another Service as a mobile security force for defense of the seaport under the tactical control of the Harbor Defense Commander (HDC). This approach to seaport facility defense should instruct efforts to revise the Air Base Defense Considerations section in JP 3–10. During lower threat operations at joint airfields, the SAA should be tasked with providing organic JFACC security forces to mitigate potential SAM threats to approach and departure corridors off the airfield in conjunction with the host nation, similar to the HDC commitment of JFMCC security forces to shore approaches. During higher threat operations, JP 3–10 should suggest the provision of a detachment of JFLCC forces in support of the JFACC and under the tactical control of the SAA to provide enhanced security for the air assets landing at and departing from joint airfields while preserving the command and control responsibilities outlined in chapter II of JP 3–10.

The United States enjoys airpower advantages that are the envy of friend and foe alike. As adversaries continue the search for inexpensive, low-tech counters to U.S. military superiority, joint doctrine must evolve to ensure that low-density/high-demand assets are afforded the security commensurate with their importance to national security. Standardizing a

defensive concept of JFLCC responsibilities for approaches to JFACC airports, as well as JFMCC seaports, during high-risk operations would provide the clear joint guidance needed to mitigate the doctrinal seam presented by SAM threats to joint airfield approach and departure corridors. This approach would also provide further assurance for the continued availability of strategic airpower capabilities across theaters worldwide while providing an additional layer of insurance and security for the continued technological superiority of U.S. airpower in a constrained budgetary environment. **JFQ**

## NOTES

<sup>1</sup> Joint Publication (JP) 3–10, *Joint Security Operations in Theater* (Washington, DC: The Joint Staff, February 3, 2010), available at <www.dtic.mil/doctrine/new\_pubs/jp3\_10.pdf>.

<sup>2</sup> Government Accountability Office (GAO), *Nonproliferation: Further Improvements Needed in U.S. Efforts to Counter Threats from Man-Portable Air Defense Systems*, 04–519 (Washington, DC: GAO, June 3, 2004).

<sup>3</sup> Christopher Bolkcom, Andrew Feickert, and Bartholomew Elias, *Homeland Security: Protecting Airlines from Terrorist Missiles*, RL31741 (Washington, DC: Congressional Research Service, 2006).

<sup>4</sup> Ibid.

<sup>5</sup> *The National Military Strategy of the United States of America 2011: Redefining America’s Military Leadership* (Washington, DC: Chairman of the Joint Chiefs of Staff, 2011), available at <www.jcs.mil/content/files/2011-02/020811084800\_2011\_NMS\_-08\_FEB\_2011.pdf>.

<sup>6</sup> Ibid.

<sup>7</sup> Field Manual (FM) 3–39, *Military Police Operations* (Washington, DC: Headquarters Department of the Army, February 16, 2010).

<sup>8</sup> Air Force Tactics, Techniques, and Procedures 3–10.2, *Integrated Base Defense Command and Control* (Washington, DC: Headquarters Department of the Air Force, March 1, 2008).

<sup>9</sup> JP 3–17, *Air Mobility Operations* (Washington, DC: The Joint Staff, October 2, 2009), available at <www.dtic.mil/doctrine/new\_pubs/jp3\_17.pdf>.

<sup>10</sup> JP 3–10.

<sup>11</sup> FM 3–90.31, *Maneuver Enhancement Brigade Operations* (Washington, DC: Headquarters Department of the Army, February 26, 2009).

<sup>12</sup> JP 3–10.

Airman scans street sector from outer wall of Bagram Airfield, Afghanistan, after insurgent attack



U.S. Air Force (Horace Murray)